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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,200	01/15/2002	Jiro Nakabayashi	1275-48	2637
23117	7590	06/19/2006	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			MATTIS, JASON E	
			ART UNIT	PAPER NUMBER
			2616	
DATE MAILED: 06/19/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,200

Applicant(s)

NAKABAYASHI, JIRO

Examiner

Jason E. Mattis

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 19-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/15/02 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/02</u> , <u>4/02</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. Figures 13-18 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 19, 21-22, 27-28, 31, 33-34, and 39 –40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pogrebinsky et al. (U.S. Publication US 2002/0101855 A1) in view of Takeo (Japanese Publication 11-215182).

With respect to claims 19 and 31, Pogrebinsky et al. discloses a packet processor including a recording medium holding a packet processing program (**See page 2 paragraphs 27 and 30 and Figure 4b of Pogrebinsky et al. for reference to an IP terminal 110, which is a packet processor processing data received via a network to reproduce the data, and for reference to the invention being embodied as software, which is a recording medium holding a program**). Pogrebinsky et al. also discloses a receiving buffer for storing received packets (**See page 2 paragraph 27 and Figure 4b of Pogrebinsky et al. for reference to jitter buffer 112, which is a buffer storing received packets**). Pogrebinsky et al. further discloses a reproducing means (**See page 2 paragraph 27 and Figure 4b of Pogrebinsky et al. for reference to decompressor 116, which is a device that reproduces data of packets**). Pogrebinsky et al. also discloses a control means to reproduce data without breaks (**See page 2 paragraph 27 and Figure 4b of Pogrebinsky et al. for reference to controller 120, which is a control means to control the reproduction of the data**). Pogrebinsky et al. further discloses that the control means modifies the receiving buffer size when a result of monitoring packets shows an increase or decrease in the number of packets with time (**See page 4 paragraphs 55-56 of Pogrebinsky et al. for reference to increasing or decreasing the size of the jitter buffer based on monitored bursts of packets**). Pogrebinsky et al. does not specifically disclose that

the control means controls packets by their number, holds a reference value, starts data reproduction when the number of packets exceeds the reference value, and collects data up to a level corresponding to the reference value before causing the reproduction of data when the data in the buffer is used up. Pogrebinsky et al. also does not disclose modifying the reference value for the number of received packets at which reproduction of data is started when a result of monitoring packets shows an increase or decrease in the number of packets with time.

With respect to claims 19 and 31, Takeo, in the field of communications, discloses a control means controlling packets by their number, holding a reference value, starting data reproduction when the number of packets exceeds the reference value, and collecting data up to a level corresponding to the reference value before causing the reproduction of data when the data in the buffer is used up **(See the abstract of Takeo for reference to controlling packets by their number, holding an initial storing amount number 208, which is a reference value, sending out voice data when voice packets are stored in a buffer 205 by the initial storing number 208, and collecting packets up to the initial storing amount 208 where there is no data in the buffer 205).** Takeo also discloses modifying the reference value for the number of received packets at which reproduction of data is started when a result of monitoring packets shows an increase or decrease in the number of packets with time **(See the abstract of Takeo for reference to adjusting the initial storing amount 208 based on monitored packet data).** Using a control means controlling packets by their number, holding a reference value, starting data reproduction when the number of

packets exceeds the reference value, collecting data up to a level corresponding to the reference value before causing the reproduction of data when the data in the buffer is used up and modifying the reference value has the advantage of allowing a processor to effectively control jitter while reducing the packet discard ratio of time dependent data streams.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Takeo, to combine using a control means controlling packets by their number, holding a reference value, starting data reproduction when the number of packets exceeds the reference value, collecting data up to a level corresponding to the reference value before causing the reproduction of data when the data in the buffer is used up and modifying the reference value, as suggested by Takeo, with the system and method of Pogrebinsky et al., with the motivation being allow a processor to effectively control jitter while reducing the packet discard ratio of time dependent data streams.

With respect to claims 21 and 33, the combination of Pogrebinsky et al. and Takeo discloses all the elements of claims 19 and 31 as shown above. Pogrebinsky et al. does not disclose modifying the reference value when the data buffer is used up.

With respect to claims 21 and 33, Takeo, in the field of communications, discloses modifying a reference value when the data buffer is used up (**See the abstract of Takeo for reference to adjusting the initial storing amount 208 based on monitored packet data**). Modifying a reference value when the data buffer is used

up has the advantage of allowing a processor to effectively control jitter while reducing the packet discard ratio of time dependent data streams.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Takeo, to combine modifying a reference value when the data buffer is used up, as suggested by Takeo, with the system and method of Pogrebinsky et al., with the motivation being allow a processor to effectively control jitter while reducing the packet discard ratio of time dependent data streams.

With respect to claims 22 and 34, the combination of Pogrebinsky et al. and Takeo discloses all the elements of claims 19 and 31 as shown above. Pogrebinsky et al. also discloses modifying the sized of the receiving buffer when data in the buffer exceeds a predetermined buffer size **(See page 4 paragraphs 55-56 of Pogrebinsky et al. for reference to increasing or decreasing the size of the jitter buffer based on monitored bursts of packets exceeding a threshold)**.

With respect to claims 27 and 39, the combination of Pogrebinsky et al. and Takeo discloses all the elements of claims 21 and 33 as shown above. Pogrebinsky et al. does not disclose recording modifications over time and modifying the receiving buffer sized based on the records.

With respect to claims 27 and 39, Takeo, in the field of communications, discloses recording modifications over time and modifying the receiving buffer sized based on the records **(See the abstract of Takeo for reference to storing records and using stored records to adjust the initial storing amount 208)**. Recording modifications over time and modifying the receiving buffer sized based on the records

has the advantage of allowing a processor to effectively control jitter while reducing the packet discard ratio of time dependent data streams.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Takeo, to combine recording modifications over time and modifying the receiving buffer sized based on the records, as suggested by Takeo, with the system and method of Pogrebinsky et al., with the motivation being allow a processor to effectively control jitter while reducing the packet discard ratio of time dependent data streams.

With respect to claims 28 and 40, the combination of Pogrebinsky et al. and Takeo discloses all the elements of claims 22 and 34 as shown above. Pogrebinsky et al. does not disclose recording modifications over time and modifying the receiving buffer sized based on the records.

With respect to claims 28 and 40, Takeo, in the field of communications, discloses recording modifications over time and modifying the receiving buffer sized based on the records (**See the abstract of Takeo for reference to storing records and using stored records to adjust the initial storing amount 208**). Recording modifications over time and modifying the receiving buffer sized based on the records has the advantage of allowing a processor to effectively control jitter while reducing the packet discard ratio of time dependent data streams.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Takeo, to combine recording modifications over time and modifying the receiving buffer sized based on the records, as suggested

by Takeo, with the system and method of Pogrebinsky et al., with the motivation being allow a processor to effectively control jitter while reducing the packet discard ratio of time dependent data streams.

4. Claims 20 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pogrebinsky et al. in view of Takeo as applied to claims 19, 21-22, 27-28, 31, 33-34, and 39 –40 above, and further in view of Ohlsson et al. (U.S. Pat. 6452950 B1).

With respect to claims 20 and 32, the combination of Pogrebinsky et al. and Takeo discloses all the elements of claims 19 and 31 as shown above. The combination of Pogrebinsky et al. and Takeo does not disclose discarding a fixed amount of data when data in the buffer exceeds a predetermined buffer size.

With respect to claims 20 and 32, Ohlsson et al., in the field of communications discloses discarding a fixed amount of data when data in a buffer exceeds a predetermined buffer size **(See column 6 line 37 to column 7 line 44 of Ohlsson et al. for reference to discarding packets when data in a buffer exceeds a size)**. Discarding a fixed amount of data when data in a buffer exceeds a predetermined buffer size has the advantage of allowing the problem of data overrun in a buffer to be overcome.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Ohlsson et al., to combine discarding a fixed amount of data when data in a buffer exceeds a predetermined buffer size, as suggested by Ohlsson et al., with the system and method of Pogrebinsky and Takeo,

with the motivation being to allow the problem of data overrun in a buffer to be overcome.

5. Claims 23, 25-26, 29-30, 35, 37-38, and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pogrebinsky et al. in view of Takeo as applied to claims 19, 21-22, 27-28, 31, 33-34, and 39 –40 above, and further in view of Cloutier (U.S. Pat. 5966387).

With respect to claims 23 and 35, the combination of Pogrebinsky et al. and Takeo discloses all the elements of claims 19 and 31 as shown above.

With respect to claims 25 and 37, the combination of Pogrebinsky et al. and Takeo discloses all the elements of claims 21 and 33 as shown above.

With respect to claims 26 and 38, the combination of Pogrebinsky et al. and Takeo discloses all the elements of claims 22 and 34 as shown above.

With respect to claims 29 and 41, the combination of Pogrebinsky et al. and Takeo discloses all the elements of claims 27 and 39 as shown above.

With respect to claims 30 and 42, the combination of Pogrebinsky et al. and Takeo discloses all the elements of claims 28 and 40 as shown above.

With respect to claims 23, 25-26, 29-30, 35, 37-38, and 41-42, the combination of Pogrebinsky et al. and Takeo does not disclose modifying a clock for data reproduction.

With respect to claims 23, 25-26, 29-30, 35, 37-38, and 41-42, Cloutier, in the field of communications, discloses modifying a clock for data reproduction (**See column**

13 lines 41-57 of Cloutier for reference to changing an output clock signal to adjust for detected jitter). Modifying a clock for data reproduction has the advantage of allowing data output to be optimized to correspond with the rate at which data is received.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Cloutier, to combine modifying a clock for data reproduction, as suggested by Cloutier, with the system and method of Pogrebinsky and Takeo, with the motivation being to allow data output to be optimized to correspond with the rate at which data is received.

6. Claims 24 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pogrebinsky et al. in view of Takeo and Ohlsson et al. as applied to claims 20 and 32 above, and further in view of Cloutier.

With respect to claims 24 and 26, the combination of Pogrebinsky et al., Takeo, and Ohlsson et al. disclose all the elements of claims 20 and 32 as shown above. The combination of Pogrebinsky et al., Takeo, and Ohlsson et al. does not disclose modifying a clock for data reproduction.

With respect to claims 24 and 36, Cloutier, in the field of communications, discloses modifying a clock for data reproduction (**See column 13 lines 41-57 of Cloutier for reference to changing an output clock signal to adjust for detected jitter**). Modifying a clock for data reproduction has the advantage of allowing data output to be optimized to correspond with the rate at which data is received.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Cloutier, to combine modifying a clock for data reproduction, as suggested by Cloutier, with the system and method of Pogrebinsky, Takeo, and Ohlsson et al., with the motivation being to allow data output to be optimized to correspond with the rate at which data is received.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason E. Mattis whose telephone number is (571) 272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jem

A handwritten signature in black ink, appearing to read 'Huy D. Vu', with a long horizontal stroke extending to the right.

HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600